This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims

1.      (Previously Presented) A method for processing a packet to transmit on a network in a host system including a plurality of network adaptors, comprising:

receiving at a receiving network adaptor a packet;

implementing, within the receiving network adaptor, a load balancing algorithm to select one of the network adaptors to transmit the received packet; and

if the selected network adaptor is not the receiving network adaptor, then forwarding, with the receiving network adaptor, the received packet to the selected network adaptor.

2.      (Currently Amended) The method of claim 1, further comprising:

determining, with the receiving network adaptor, whether the receiving network adaptor is a primary network adaptor or a secondary network adaptor; and

transmitting, with the receiving network adaptor, the received packet over the network if the receiving network adaptor is the secondary network adaptor, wherein [[the]] the load balancing algorithm implemented in the receiving network adaptor selects one of the network adaptors in response to determining that the receiving network adaptor is the primary network adaptor.

3.      (Previously Presented) The method of claim 2, wherein only the load balancing algorithm implemented in the primary network adaptor selects one of the network adaptors.

4.      (Previously Presented) The method of claim 1, wherein the load balancing algorithm selects one of the network adaptors by:

selecting one of the network adaptors as a function of a destination network address to which the received packet is to be transmitted over the network.

5.      (Original) The method of claim 4, wherein the network address comprises one of an Internet Protocol address and Fibre Channel address.

6. (Previously Presented) The method of claim 5, wherein selecting one network adaptor as the function of the target network address comprises using a hash algorithm to select one network adaptor based on the target network address.

7. (Previously Presented) The method of claim 1, wherein the load balancing algorithm further performs:

determining one network adaptor based on a relative load of each of the network adaptors.

8. (Previously Presented) A method comprising:

receiving a packet;

determining a primary network adaptor comprising one of a plurality of network adaptors, wherein the network adaptors include the primary network adaptor and at least one secondary network adaptor; and

initiating transmission of the packet to the primary network adaptor, wherein the primary network adaptor implements a load balancing algorithm to select one of the primary or secondary network adaptors to transmit the received packet and, in response to the load balancing algorithm selecting one secondary network adaptor, the primary network adaptor redirects the packet to one of the at least one secondary network adaptors to transmit the packet.

9. (Original) The method of claim 8, wherein the device driver does not perform load balancing operations when selecting one of the plurality of network adaptors to receive the packet.

10. (Original) The method of claim 8, wherein the device driver further performs:

detecting a failure of one network adaptor designated as the primary network adaptor;

determining an available network adaptor to function as the primary network adaptor, wherein subsequently received packets are transmitted to the determined network adaptor;

configuring a register within the determined network adaptor to cause the determined network adaptor to operate as the primary network adaptor and perform load balancing operations.

11.    (Previously Presented) A method implemented in a device driver executing in a host system for processing a packet to transmit on a network, wherein the host includes a plurality of network adaptors, and wherein the device driver performs:

receiving a packet;

determining a primary network adaptor comprising one of network adaptors, wherein the network adaptors include the primary network adaptor and at least one secondary network adaptor; and

initiating transmission of the packet to the primary network adaptor, wherein the primary network adaptor implements a load balancing algorithm to select one of the network adaptors to transmit the received packet and, in response to the load balancing algorithm selecting one secondary network adaptor, the primary network adaptor redirects the packet to one of the at least one secondary network adaptors to transmit the packet.

12.    (Original) The method of claim 11, wherein the device driver does not perform load balancing operations when selecting one of the plurality of network adaptors to receive the packet.

13.    (Original) The method of claim 11, wherein the device driver further performs:

detecting a failure of one network adaptor designated as the primary network adaptor;

determining an available network adaptor to function as the primary network adaptor, wherein subsequently received packets are transmitted to the determined network adaptor; and

configuring a register within the determined network adaptor to cause the determined network adaptor to operate as the primary network adaptor and perform load balancing operations.

14.    (Previously Presented) A network adaptor in a host system in communication with at least one external network adaptor in the host system, comprising:

an interface to interface with at least one external network adaptor;

control logic to cause the network adaptor to perform operations, the operations comprising:

receive a packet;

implement a load balancing algorithm to select one of the network adaptors in the host system to transmit the received packet; and

if the selected network adaptor is one of the at least one external network adaptors, then forward the received packet to the selected network adaptor.

15.    (Previously Presented) The network adaptor of claim 14, wherein the operations caused by the control logic further comprise:

determine whether the network adaptor is a primary network adaptor or a secondary network adaptor; and

initiating transmission of the received packet over a network if the network adaptor is the secondary network adaptor, wherein the load balancing algorithm selects one of the network adaptor and the external network adaptors in response to determining that the network adaptor is the primary network adaptor.

16.    (Previously Presented) The network adaptor of claim 14, wherein the load balancing algorithm further performs:

select one network adaptor as a function of a destination network address to which the received packet is to be transmitted over the network.

17.    (Previously Presented) The network adaptor of claim 16, wherein to select one network adaptor as the function of the target network address comprises using a hash algorithm to select one network adaptor based on the target network address.

18.    (Previously Presented) The network adaptor of claim 14, wherein the load balancing algorithm further performs:

determine one network adaptor based on a relative load of each of the network adaptors.

19.    (Previously Presented) The network adaptor of claim 14, wherein the packets are coded using the Internet Protocol (IP).

20.　　(Previously Presented) A system coupled to a network and data storage, comprising:

a processor;

a storage controller managing Input/Output (I/O) access to the data storage;

a plurality of network adaptors capable of transmitting and receiving data on the network;

a device driver, executed by the processor, to perform operations, the operations comprising:

receive a packet;

determine a primary network adaptor comprising one of a plurality of network adaptors, wherein the network adaptors include the primary network adaptor and at least one secondary network adaptor; and

initiate transmission of the packet to the primary network adaptor, wherein the primary network adaptor implements a load balancing algorithm to select one of the primary or secondary network adaptors to transmit the received packet and, in response to the load balancing algorithm selecting one secondary network adaptor, the primary network adaptor redirects the packet to at least one of the secondary network adaptors to transmit the packet.

21.　　(Original) The system of claim 20, wherein the device driver does not perform load balancing operations when selecting one of the plurality of network adaptors to receive the packet.

22.　　(Original) The system of claim 20, wherein the device driver operations further comprise:

detect a failure of one network adaptor designated as the primary network adaptor;

determine an available network adaptor to function as the primary network adaptor, wherein subsequently received packets are transmitted to the determined network adaptor; and

configure a register within the determined network adaptor to cause the determined network adaptor to operate as the primary network adaptor and perform load balancing operations.

23.     (Original) The system of claim 20, wherein the data storage comprises a magnetic storage media.


24.     (Canceled)


25.     (Previously Presented) An article of manufacture for processing a packet to transmit on a network in a host system including a plurality of network adaptors, wherein the article of manufacture causes operations to be performed, the operations comprising:

receiving at a receiving network adaptor a packet;

implementing, within the receiving network adaptor, a load balancing algorithm to select one of the network adaptors to transmit the received packet; and

if the selected network adaptor is not the receiving network adaptor, then forwarding, with the receiving network adaptor, the received packet to the selected network adaptor.


26.     (Previously Presented) The article of manufacture of claim 25, wherein the operations further comprise:

determining, with the receiving network adaptor, whether the receiving network adaptor is a primary network adaptor or a secondary network adaptor; and

initiating a transmission, with the receiving network adaptor, of the received packet over the network if the receiving network adaptor is the secondary network adaptor, wherein the load balancing algorithm implemented in the receiving network adaptor selects one of the network adaptors in response to determining that receiving network adaptor is the primary network adaptor.


27.     (Previously Presented) The article of manufacture of claim 26, wherein only the load balancing algorithm implemented in the primary network adaptor selects one of the network adaptors.


28.     (Previously Presented) The article of manufacture of claim 25, wherein the load balancing algorithm selects one for the first and second network adaptors by:

selecting one of the network adaptors as a function of a destination network address to which the received packet is to be transmitted over the network.

29.    (Previously Presented) The article of manufacture of claim 27, wherein selecting one network adaptor as the function of the target network address comprises using a hash algorithm to select one network adaptor based on the target network address.

30.    (Currently Amended) The article of manufacture of claim [[24]] 25, wherein the load balancing algorithm further performs:

determining one network adaptor based on a relative load of each of the network adaptors.

31.    (Previously Presented) An article of manufacture for processing a packet to transmit on a network, in a host that includes a plurality of network adaptors, wherein the article of manufacture causes operations to be performed, the operations comprising:

receiving a packet;

determining a primary network adaptor comprising one of a plurality of network adaptors, wherein the network adaptors include the primary network adaptor and at least one secondary network adaptor; and

initiating transmission of the packet to the primary network adaptor, wherein the primary network adaptor implements a load balancing algorithm to select one of the primary or secondary network adaptors to transmit the received packet and, in response to the load balancing algorithm selecting one secondary network adaptor, the primary network adaptor redirects the packet to the secondary network adaptor to transmit the packet.

32.    (Original) The article of manufacture of claim 31, wherein the load balancing operations are not performed when selecting one of the plurality of network adaptors to receive the packet.

33.    (Original) The article of manufacture of claim 31, wherein the operations further comprise:

detecting a failure of one network adaptor designated as the primary network adaptor;

determining an available network adaptor to function as the primary network adaptor, wherein subsequently received packets are transmitted to the determined network adaptor; and

configuring a register within the determined network adaptor to cause the determined network adaptor to operate as the primary network adaptor and perform load balancing operations.